Q. No.	Problem Statment
1	Given two integers N1 and N2, interchange values of the variable and print it.
2	Given two integers N1 and N2, divide the former by the latter and store the result in R.
3	Read a float type number from a keyboard using ReadLine and display it using WriteLine.
4	Given an integer N as input, find 1's complement of N.
5	Given an even integer N as input, write a program to divide N by 2 using bitwise operator.
6	Given two integers N1 and N2 as input, find their sum without using addition('+') operator and loops.
7	Given two characters C1 and C2 as input, find the modulus.
8	Given an integer N as input, find whether it is even or not using bitwise operator.
9	Given two integers N1 and N2 as input, write a program to swap them without using a third operator and display their values.
10	Given two integers N1 and N2 as input, find their product without using multiplication('*') operator and loops.
11	Given two integers N1 and N2 as input, Write a program to swap them using bitwise operator and display value of N1 and N2 respectively.
12	Given a number N, display the sum of the first N numbers.
13	Given two integers N1 and N2 as input, perform their division and store them in a float variable.
14	Division of two int numbers and store them in double
15	Given Principal Amount P, Rate of Interest per year R and Number of Years T. Calculate simple interest. Simple interest = (Principle amount * Rate of Interest * Number of Years) / 100
16	Given two integer numbers N1 and N2, find the average of those and store result in double type number R.
17	Given an integer N, determine whether the number is positive, negative or zero. The program should accept an integer N and return: 1 if N is positive. -1 if N is negative. 0 if N is zero.
18	Given an integer N, determine whether N is even or odd. Display 1 if N is even or 0 otherwise.
19	Given two numbers N1 & N2, find the larger number. Display the greater among the two.
20	Given three integers N1, N2 & N3, find the largest number. Write a program to display the output according to the following condition: 1 if all three numbers are equal. 0 if two numbers are equal and larger than a third number. Largest number if otherwise.
21	Given basic salary as an input, calculate the gross salary according to the given conditions: If Basic Salary <= 10000 : HRA = 20%, DA = 80% If Basic Salary is between 10001 to 20000 : HRA = 25%, DA = 90% If Basic Salary >= 20001 : HRA = 30%, DA = 95%

22	Given an integer N as input, which represents the number of electricity units consumed. Calculate the total electricity bill according to the given conditions: For first 50 units $ 0.50/unit For next 100 units $ 0.75/unit For next 100 units $ 1.20/unit For unit above 250 $ 1.50/unit An additional surcharge of 20% is added to the bill.
23	Given an integer N as an input, where N indicates the number of the month in a Gregorian year. e.g. 1 represents "January", 2 represents "February" and vice versa. Month numbers 1, 3, 5, 7, 8, 10 and 12 represent Jan, Mar, May, Jul, Aug, Oct, and Dec. These months have 31 days, so display 31 for them. Month numbers 4, 6, 9 and 11 represent Apr, Jun, Sep, and Nov. These months have 30 days, so display 30 for them. Month number 2 represents Feb, which has 27 or 28 days, so regardless of the leap years display 27 for Feb.
24	Given a positive integer N, representing a day of the week, display the name of that weekday. if N = 1, display "Sunday", if N = 2, display "Monday", if N = 3, display "Tuesday", if N = 4, display "Wednesday", if N = 5, display "Thursday", if N = 6, display "Friday", if N = 7, display "Saturday".
25	Given 3 positive integers in input as angle measures of a triangle in degree, check whether a triangle can be formed using the three angle measures. Display "Yes" if it is possible to form a triangle, otherwise "No".
26	Given 3 positive integers in input as sides of a triangle, check whether a triangle is Equilateral, Isosceles or Scalene triangle using if else. Display the type of triangle in the output, whether "Equilateral", "Isosceles" or "Scalene".
27	Given an integer as an input, it represents the temperature in centigrade. Determine the weather conditions based on the temperature. Temperature < 0 then print "Freezing weather". Temperature 0 - 10 then print "Very cold weather". Temperature 10 - 20 then print "Cold weather". Temperature 20 - 30 then print "Normal in temperature". Temperature 30 - 40 then print "Its Hot". Temperature >= 40 then print "Its Very Hot".
28	Given the marks of a student in three subjects as an input, find whether the student is eligible for admission. Display"Yes" if the student is eligible for admission otherwise "No". Criteria for admission: Marks in Physics >= 55, Marks in Chemistry >= 50, Marks in Mathematics >= 65, and Total in all three subjects >= 180 or total in Math and Physics >=140
29	Given two integers as an input, check whether their division comes out to be integer or float. For this question any number with the part after the decimal point as 0 is not considered as a float number. e.g. 2.0000 is an integer as it has the exact value as 2, but 2.41 is a float.

30	Given an integer N as an input, where N indicates the number of the month in a Gregorian year. e.g. 1 represents "January", 2 represents "February" and vice versa. Month numbers 10, 11, 12 and 1 represent winter season, since December to January is Winter season. Month numbers 2, 3, 4 and 5 represent summer season, since February to May is Summer season. Month numbers 6, 7, 8 and 9 represent rainy season, since June to September is Rainy season.
31	Given the age of a person as input, classify the person as young, adult or old. Print "young" if age <= 21. Print "adult" if age > 21 and age < 40. Print "old" if age >= 40.
32	Given is an integer, which represents the amount as an input from the user, display the minimum number of notes $ (500, 100, 50, 20, 10, 5, 2, 1) required for the amount.
33	A person is said to be eligible to donate blood only if, Age > = 17 years and, Weight > = 110 pounds.
34	Given two strings as input, check whether they are equal or not. Display "Yes" if they are equal, otherwise "No".
35	Given is the age and weight of a person as an input, Determine whether the person is eligible for donating blood or not. Display "Yes" if the person is eligible otherwise display "No".
36	Given an integer N as input, where N is the age of a person, check whether the person is eligible for voting or not. Display "Yes" if he/she is eligible for voting otherwise "No".
37	Given an integer N as input, check whether N is between a specified range or not. Print "Yes" if N is between the specified range, otherwise "No".
38	Given an integer N as input, check whether N is divisible by 5 and 11 or not. Display "Yes" if N is divisible by 5 and 11, otherwise "No".
39	Given 2 integers as input, check whether they are equal or not. Display "Yes" if they are equal otherwise "No".
40	Given three integers N, N1 and N2, find the difference of N1 and N2 is greater than or equal to N.
41	Write a function: int solution(int N, int N1, int N2) that accepts three integers and return 1, 2 or 3 according to a given conditions. if N1-N2 is equal to N return 1. if N1-N2 is greater than N return 2. if N1-N2 is less than N return 3.
42	Given two integers N1 and N2, write a program to display a number based on following conditions: 0 if N1 is 5 and N2 is 2. 1 if N1 is 5 and N2 is not 2. 2 if N1 is not 5 and N2 is 2. 3 if N1 is not 5 and N2 is not 2. Use nested-if-else statement.
43	Given a year, determine whether it is a leap-year or not. Reference to determine whether a year is a leap year or not: https://www.mathsisfun.com/leap-years.html Display the output according to the following condition: 1 if the value represents a leap year. 2 if the value does not represent a leap year. 3 if the value is less than 1 or greater than 9999.

44	Given an integer N, find a number is divisible by 2, 3 or 6 using Switch Statement. Write a function solution that accepts an integer number N and returns a largest number among 2, 3 and 6 by which N is divisible. If a number is not divisible by 2,3 or 6 then return -1. Use switch statement.
45	Given an integer N, which represents aggregate of marks obtained by a student, find the grade according to the marks obtained(Use Ladder if-else). if 90 <= N, grade obtained is 'A'. if 60 <= N <= 89, grade obtained is 'B'. if 30 <= N <= 59, grade obtained is 'C'. if N < 30, grade obtained is 'D'.
46	Given a character C, check whether it is a vowel or consonant. Vowels = { 'a', 'e', 'i', 'o', 'u' } Consonants = { x | x ∉ Vowels } Given a character C, check whether it is a vowel or consonant. Vowels = { 'a', 'e', 'i', 'o', 'u' } Consonants = { x | x ∉ Vowels }
47	Given a character as an input, check whether it is an alphabet or not, if yes then find whether it is uppercase or lowercase if uppercase Display 'U' and if lowercase display 'L'. In case if it is not an alphabet display '-1'.
48	Given a coordinate point P(x, y) in an X-Y coordinate system as an input, determine in which quadrant the coordinate point lies. print '1' if point is in 1st quadrant. print '2' if point is in 2nd quadrant. print '3' if point is in 3rd quadrant. print '4' if point is in 4th quadrant. point (0, 0) is the origin, print '0' for origin.
49	Given a character as an input, decides the arithmetic operation to be performed on the next two integers to be entered, e.g. '+' for addition, '-' for subtraction, '/' for division, and, '*' for multiplication.
50	Given an integer N as an input, decides the geometrical figure for which the area has to be calculated, e.g. N=1 for circle, N=2 for rectangle, and N=3 for triangle. Calculate and display the area of the respective figure.
51	Given two integers N1 and N2, find the LCM of N1 and N2.
52	Given two integers N1 and N2, find the Highest Common Factor(HCF) of N1 and N2.
53	Given a number N, display all the natural numbers from 1 to N, which are divisible by 3 and 5.
54	Print all alphabets from a to z using loop.
55	Given an integer N, display the first N even natural numbers, and their sum.
56	Given an integer N, display its addition table from the sum of N and 1 up to the sum of N and 10.
57	Given a number N, find the sum and average of N natural numbers, taken as an input.
58	Given numbers N, print all even numbers between 1 to N using loop
59	Given a positive integer N, find the factorial of it.
60	Given two integers N1 and N2, find the LCM of those numbers.
61	iven an integer, find whether the number is a Prime number or not. Display 1 if N is prime else 0.
62	Given a long type number N, reverse N using the while statement. Write a function solution that accepts a long type number N. The function should return a number such that the ordering of its digits is the reverse of that of N.

63	Given an integer N, print its multiplication table up to the product of N and 10 using the for statement.
64	Given a number N, find the frequency of digits in N using loop.
65	Given a number N, swap the first and last digit of N using a loop.
66	Given an integer N, Compute the sum of digits in N using a loop.
67	Given numbers N, find sum of first and last digit of a number N using loop.
68	Given a integer N, count number of digits in string N using loop.
69	Given two integers N1 and N2, find the Armstrong numbers between N1 and N2.
70	Given an integer N, find whether it is Armstrong number or not.
71	Given a number N, find the smallest number such that the sum of its digits is N and it is divisible by 10N .
72	Given an integer N, find the cube of N using a function. Write a function that accepts an integer N. The function should return cube of N
73	Given an integer radius R, find the area of a circle. Area of circle = pi * radius * radius. Where, pi is mathematical constant whose value is 3.14
74	Given two integers N1 and N2, find the maximum between them using a function. Write a function that accepts integers N1 and N2. The function should return the maximum of N1 and N2.
75	Given an integer N, find whether N is a Palindrome using recursion. Write a function that accepts an integer N. The function should return 1 if N is a palindrome else 0.
76	Given a number N as input, write a program to reverse N using recursion. Write a function that accepts an integer N. The function should return reverse of N using recursion.
77	Given a string S, write a program to copy the given string into another string.
78	Given a string S, convert all characters of S to uppercase without using system library functions.
79	Given a string S and a character C, remove all the occurrences of given character from the string. Do not use system library to solve the problem.
80	Given a string S, check whether a string S is Palindrome not.
81	Given two lists L1 and L2, compare the given two lists.
82	Write a function: def solution(L1,L2): that accepts two lists L1 and L2. The function should compare the given two lists and should return True if they have at least one common member else return False.
83	Given a string S, count the repeated character(s).
84	Write a function: def solution(S): that accepts string S. The function should return the count of repeated characters('A' to 'Z' and 'a' to 'z'.
85	Given a string S and shift number K, encrypt S using Caesar Cipher algorithm. The encryption only works on alphabets. Numbers and symbols such as 1 to 9, -, &, $ etc remain unencrypted.
86	Given a string S, find the number of words in the string.
87	Given a string S, find the maximum occurring character in the input string. e.g., if the input string is “test” then the function should return ‘t’.
88	Given a string S, Write a program to convert case of characters in the string S, i.e. if the character is in lower case convert it to upper case and vice versa
89	Given a string S and a word W, count the number of times the given word appears in the string.
90	Given a string S, check whether all characters are in uppercase or not

91	Given a character, find the ASCII value of it.
92	Given a string S, sort the words in S.
93	Given a string S containing a number of words. If the count of words in the string S is even then reverse its even position's words else reverse its odd position, push reversed words at the starting of a new string and append the remaining words as it is in order.
94	Given two values M and N. Read M rows, each of length N in the 2-dimensional list type L.
95	Given a list of integers, find the sum of its elements.
96	Write a function solution that accepts a 2D-list L, the function should returns the largest element in an list.
97	Given a square matrix, find an absolute difference between sums of its diagonal elements. write a function solution that accept a 2-dimensional list L. The function should return absolute difference between sums of diagonals.
98	Write a function solution that accepts a matrix A of size N x N as 2D list's elements. The function should return a list of main diagonal elements.
99	Given a matrix, find a sum of both diagonal elements of the matrix. Write a function solution that accepts a matrix A of size N x N as 2D list's elements. The function should return sum of both diagonal elements.
100	Write a function solution that accepts A1 & A2 are matrices of size M and N. The function should return addition of these matrices.
101	Write a function solution that accepts two lists L1 and L2 (2-dimensional lists). The function should return multiplication of these lists. If a multiplication is not possible return list with value -1 (list will be [[-1]] containing single row and column)
102	Given an array A of integers, write a program to replace each element in the array by the previous element. Replace the first element by -1.
103	Given an array of integers, write a program to rotate the array to the right side K times.
104	Given a filename FN. The function should delete the second word from the file and write remaining content into the same file.
105	Read numbers from a file and find the sum of numbers. Perform the following operations Read the console input and create a file.txt. $ in the console input is considered as an end of content for a file. Close the file after creation. Open the file in a read mode and read the numbers from a file and print the sum of all numbers.
106	Print the size of a file without opening a file.
107	Given a file, sort the words in a file alphabetically. Write a function: def solution(FN): that accept file name FN. The function should sort words in a file and return list of words.
108	Given a file.txt, find file properties.
109	Convert the case of text in given file to lower case.
110	Count the number of lines in a file.
111	Append the content of one file at the end of another file.
112	Read the file of numbers and put the even and odd numbers in separate files.
113	Find the first occurrence of a word in a given file.
114	Find the last occurrence of a given word in a file.
115	Capitalize the first letter of every word in a file

116	Encrypt a text file Decrypt a text file